

CLAIMS

1. A polymeric stent, especially useful in surgical endoscopy and for the treatment of salivary gland ducts comprising; an elongated tube, wherein the proximal end of said tube is having a funnel-like shape; and wherein said funnel further comprise at least one gorge, which enables the suturing of said stent to said duct.
2. The polymeric stent according to claim 1, having means to be at least temporary anchored inside the lumen of a salivary duct.
3. The polymeric stent according to claim 2, wherein said means to anchor said stent inside the lumen of the salivary gland duct is at least one wing-like flap.
4. The polymeric stent according to claim 2, comprising two wing-like flaps.
5. The polymeric stent according to claim 2, adapted to be at least temporally anchored inside the lumen of a salivary duct, wherein the tube additionally comprises at least one extended portion on its width.
6. The polymeric stent as defined in claim 5, wherein the extended portion is an accordion-like member; as described in Figure 2A.
7. The polymeric stent as defined in claim 2, additionally comprising a plurality of flaps, arranged in a circular array of folded flaps, as described in Figure 2C.
8. The polymeric stent according to claim 1, in the length of approximately 20 to 65 mm.
9. The polymeric stent according to claim 1, in the length of approximately 32 to 48 mm.
10. The polymeric stent as defined in claim 1, wherein the internal diameter of the elongated tube is in the range of approximately 1.0 to 4.5 mm.
11. The polymeric stent according to claim 1, wherein the internal diameter of the elongated tube is in the range of approximately 1.5 to 3.0 mm.
12. The polymeric stent according to claim 1, wherein the length of the funnel-like member is in the range of approximately 1.0 to 4.5 mm.
13. The polymeric stent according to claim 1, wherein the internal diameter of the funnel-like member is in the range of approximately 1.0 to 4.5 mm.
14. The polymeric stent according to claim 1, wherein the tube is selected from a porous or a non-porous article, made by the method selected from knitting or weaving a polymeric sleeve; extruding, cast-forming or press-molding a polymeric raw-material.

15. The polymeric stent according to claim 1, suitable for either local or systemic delivery of compounds selected from drugs and other substances.
16. The polymeric stent according to claim 14, wherein the drug to be delivered is selected from one or more biocides, steroid anti-inflammatory agents, antiviral compound, analgesics, local anesthetics, anticoagulants, antihypertensive substances, vitamins and contrast media.
17. The polymeric stent according to claim 15, wherein the biocide to be delivered is selected from cetylpyridinium chloride, benzalkonium chloride, chlorhexidine, cetyltrimethylammonium bromide, polyoxyethylene, nonylphenols, alkylaryl sulfonates, miconazole nitrate, metronidazole, trimethoprim, chloramphenicol, sulfamethoxazole; cetamide or any effective antibiotic.
18. The polymeric stent according to claim 15, wherein the steroid anti-inflammatory agents to be delivered are selected from corticosteroids and any hydrocortisone containing compositions.
19. The polymeric stent according to claim 15, wherein the local anesthetic is selected from lidocaine, adrenaline, ephedrine, epinephrine, aminophylline, and theophylline.
20. The polymeric stent according to claim 1, having means to be temporally anchor to said stent inside the lumen of the salivary gland duct to be treated, comprising a funnel with two gorges.
21. The polymeric stent according to claim 1, as described in figure 2.
22. A method for implanting the polymeric stent into the lumen of a salivary gland duct as defined in claim 1 and in any preceding claims, comprising;
 - (a) inserting said stent into a salivary gland duct to be treated, such that all of the tube is located in said duct and such that the proximal side of said stent is located inside the oral cavity;
 - (b) suturing said stent to the mucosa and/or the periosteum near the lingual side of the anterior teeth by means of sutures, wherein said sutures are sutured to at least one gorge located in the funnel.
23. The method according to claim 22, wherein the implanting the polymeric stent into the lumen of a salivary gland duct as defined in claim 1 and in any preceding claims, is aided with a relatively rigid guidance member, comprising;
 - (a) inserting an effective portion of said guidance member into the tube of the stent at its proximal end;

- (b) inserting said stent into a salivary gland duct to be treated, such that all of the tube is located in said duct and such that the proximal side of said stent is located inside the oral cavity;
- (c) removing said guidance member from the stent;
- (d) suturing said stent to the mucosa and/or the periosteum near the lingual side of the anterior teeth by means of sutures, wherein said sutures are sutured to at least one gorge located in the funnel.

24. The method according to claim 22 or any preceding claim, especially useful for the treatment of strictures, kinks, and any pathology of the salivary gland duct.

25. The method according to claim 22, or any preceding claim, especially useful for practice along and after a surgical endoscopy.

26. The method according to claim 22, or any preceding claim, wherein said treatment by the polymeric stent defined in claim 1 and in preceding claims is for a period of approximately two weeks.